

REMARKS

Claim 27 has been amended. Claims 1-26 and 33-48 were previously canceled. Claims 49-50 have been added. No new matter has been added.

Claims 27-30 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Wolstenholme et al., U.S. Patent No. 5,751,012 (Wolstenholme). This rejection is respectfully traversed.

As amended, independent claim 27 recites an “array of resistance variable memory cells” having “at least one memory cell comprising pillars of stacked materials on a semiconductor substrate, the stacked materials comprising a first electrode layer, a chalcogenide glass layer having metal ions diffused therein and being capable of changing resistance under the influence of an applied voltage, and a second electrode layer.”

Wolstenholme fails to disclose all limitations of claim 27. Wolstenholme relates to a polysilicon pillar diode. According to Wolstenholme, the polysilicon pillar diode includes a plurality of polysilicon layers that are stacked on a substrate. The polysilicon pillar diode is below a memory element. Wolstenholme’s memory element includes a chalcogenide layer, but the polysilicon pillar does not. Therefore, Wolstenholme does not anticipate claim 27 or any claims depending therefrom. For at least these reasons, withdrawal of this rejection is respectfully requested.


Claims 31 and 32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wolstenholme in view of Shroff et al., U.S. Patent No. 6,515,343 (Shroff). This rejection is respectfully traversed.

As discussed above, Wolstenholme fails to disclose, teach or suggest all limitations of independent claim 27. Shroff relates to an antifuse memory and is cited for teaching a barrier layer. Shroff, however, is silent about any of the limitations of claim 27. Therefore, Shroff does not supplement the deficiencies of Wolstenholme. For at least these reasons, withdrawal of this rejection is respectfully requested.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

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Respectfully submitted,

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